**U.S. DEPARTMENT OF THE INTERIOR**
**BUREAU OF LAND MANAGEMENT**
**PALM SPRINGS-SOUTH COAST FIELD OFFICE**

**ENVIRONMENTAL ASSESSMENT**
**EA Number CA-660-05-18**

---

| | |
|---|---|
| **DATE:** | December 29, 2004 |
| **TITLE / PROJECT TYPE:** | Central Meccacopia OHV Route Restoration |
| **CASE FILE / PROJECT NO:** | N/A |
| **FUNDING CODE:** 7123 | **PROGRAM ELEMENT:** JA |
| **BLM OFFICE:** | Palm Springs-South Coast Field Office<br>690 W. Garnet Avenue, P.O. Box 581260<br>North Palm Springs, CA 92258-1260 |
| **APPLICANT / PROPONENT**: | BLM |
| **LOCATION OF PROPOSED ACTION:** | San Bernardino Base Meridian, Riverside County |
| Township 6S, Range 10E: | Section 6, S ½; Section 7, S ½; Section 8, NW ¼; Section 24, SE ¼; Section 25, S ½; Section 26, NE ¼; Section 35, SE¼; |
| Township 6S, Range 12E: | Section 27, E ½ |
| Township 6S, Range 13E: | Section 26, NE ¼ and S ½; Section 32, E ½ |
| Township 7S, Range 10E: | Section 1, NE ¼; Section 14, S ½ |
| Township 7S, Range 11E: | Section 6, W ½; Section 34, NW ¼ |
| Township 7S, Range 12E: | Section 34, SE ¼ |
| Township 7S, Range 13E: | Section 4, NW ¼; Section 9, SE ¼; Section 14, NW ¼; Section 29, SW ¼; Section 31, N ½ |
| **PROJECT ACREAGE:** | Approximately two and a half acres (10,000 square meters) of direct impact, five acres including diffuse impacts |
| **USGS TOPOGRAPHIC MAPS:** | Cottonwood Basin, Mortmar, Orocopia Canyon, Red Canyon, and East of Red Canyon |

**LAND USE PLAN CONFORMANCE and Other Regulatory Compliance:** In accordance with Title 43 Code of Federal Regulations 1610.5-3, the proposed action and alternatives are in conformance with the following approved land use plans: **California Desert Conservation Area (CDCA) Plan, 1980; CDCA Plan Amendment for the Coachella Valley, 2002; Northern and Eastern Colorado Desert (NECO) Coordinated Management Plan (CDCA Plan Amendment, 2002).**

The US Fish and Wildlife Service (USFWS) was consulted informally regarding the specified restoration work in this area (see EA CA-660-03-016 and EA CA-660-05-010). A determination of beneficial affect was made by the BLM and the USFWS and formal consultation was not required. The Federal Land

Policy and Management Act of 1976 (FLPMA) charges the BLM with the responsibility to manage public lands in a manner that will "protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values". Section 106 of the National Historic Preservation Act, as implemented at 36 CFR Part 800, requires Federal agencies to take into account the effects of their undertakings on historic properties.

## NEED FOR THE PROPOSED ACTION

The Meccacopia Special Recreation Management Area (SRMA) includes the Mecca Hills and the Orocopia Mountains. This Environmental Assessment covers restoration work to be done in the central section of the SRMA. Over fifty Off-Highway Vehicle (OHV) routes occur in the area, including the Red Canyon Jeep Trail, the Meccacopia Trail, Amy's Wash, and Summit Road. Route designations for this area were determined through the NECO plan, but the designations have yet to be fully implemented on the ground with signs and rehabilitation of closed routes. Many side trails spur off of the approved ("open" and "limited") routes. These side trails are comprised of specific routes designated "closed" through the NECO plan; numerous trails or vehicle tracks that were not designated through the NECO plan, including hill climbs that are not approved for use; and vehicle ways in wilderness, which are statutorily not available for casual motorized-vehicle use, as well as evidence of other vehicle intrusions. These vehicle routes and trails may be causing increased soil erosion, soil compaction, and fragmentation of critical habitat for the desert tortoise (*Gopherus agassizii*). They are the sites for the proposed rehabilitation efforts in order to minimize soil erosion and loss of native vegetation. Rehabilitating closed and non-designated routes and trails would encourage OHV's to stay on BLM-approved routes within the project area. OHV users riding on approved routes would likely experience enhanced scenery, quiet and solitude, and an increase in observable wildlife due to this restoration work. Increased OHV compliance together with increased plant cover and diversity of shrubs, forbs, and grasses is expected to improve wildlife habitat, increase wildlife populations, and restore ecosystem processes.

A few closed routes in the Meccacopia SRMA are used by California Department of Fish and Game (CDFG) personnel to access and maintain Big Game Guzzlers. These routes have been identified through informal consultation and would not be rehabilitated, although efforts would be made where possible to ensure that only CDFG personnel have access to the routes. Restoration actions would not preclude the creation of routes which may be necessary to access new Big Game Guzzlers which may be created in the future.

A timely response by BLM for soil protection and vegetation restoration in the study area would afford greater protection to species of special concern, to outstanding scenic landscapes, and to recreation uses, thereby meeting public expectations for environmental protection while advancing opportunities for high-quality, safety-conscious OHV recreation.

## DESCRIPTION OF THE PROPOSED ACTION and ALTERNATIVES

### Background

In FY 2005, the BLM Palm Springs-South Coast Field Office (FO) would restore upland desert scrub and desert wash woodland in the Meccacopia Special Recreation Management Area (SRMA). The restoration work outlined in this EA lies outside of private land in-holdings. Out of forty sites, seven are at least partially within congressionally designated Wilderness (identified in Table 1 and Figure 1). The California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division is supporting this effort as part of its long-range strategy to conserve the desert soils and the native vegetation of OHV recreation sites while improving the quality of outdoor experiences for the public recreating with OHV's.

## 1. Proposed Action

The Bureau of Land Management proposes to restore unauthorized side trails and hill climbs that stem from approved routes in the Meccacopia SRMA, using the Student Conservation Association (SCA) as contractors for the restoration work. Work may also be done by volunteers or BLM personnel in order to ensure completion of the project, following the procedures outlined below. Restoration activities would take place in creosote (*Larrea tridentata - Ambrosia dumosa*) scrub and microphyll woodland vegetation communities. The proposed actions would use only the approved motorized routes within the Meccacopia SRMA, including adjacent lands, to access restoration sites. Approximately 3,900 meters of closed and unauthorized routes would be restored, with an average width of two and a half meters, for a total of 10,000 square meters (2.4 acres). Lands adjacent to the routes may be diffusely impacted by careful, limited collection of natural materials for restoration of the unauthorized route. A brief description of all restoration sites may be found in **Table 1**. Below is a summary of the restoration techniques which may be employed for the project. Soil treatments (pitting and decompaction) would be tested, as well as a 'no treatment' control. Because of the age, sensitivity, and lack of vegetative cover on desert pavements, sites with that soil type would be excluded from pitting or decompaction. Pitting has been found to leave highly visible, unattractive scars on the landscape (M. Daniels pers. comm.) and soil scientists at the 2005 Mojave Desert Science Symposium recommended against any kind of mechanical decompaction of desert pavements. Water bars would be built on half of the hill climbs to test their effectiveness versus a 'no treatment' control. Weed-free straw bales would be used at approximately half the restoration sites to discourage continued illegal vehicular use. Table 1 contains the preliminary assignments of soil treatments and straw bales, which would be subject to change. SCA restoration technicians would decide which restoration techniques to employ at each site outside of the prescribed treatments. Only hand tools would be used for the restoration, except the possible use of augers for planting vegetation, however, no mechanized equipment would be used in designated wilderness areas. Overall, the restoration aims to restore the soil and topography to a more natural state which would enhance natural regeneration of vegetation. SCA restoration technicians would attempt to make the line-of-sight of the restored route blend in with its surroundings, therefore disappear.

**Restoration Techniques:**

*Decompaction*
Non-designated trails with repeated vehicle traffic may require soil decompaction to increase water infiltration. Improving water infiltration allows plants to establish and burrowing animals such as ants, rodents, and foxes, to inhabit the soil again. Workers shall use hand tools such as soil spades, spading forks, and shovels to loosen the top two to six inches of soil.

*Soil Pitting*
Soil pitting contours the soil to direct water flow and draw wind-blown seeds to focal spots on the ground. Pitting first creates bowls approximately one to two feet wide and six inches deep. This practice creates microsites in the bowls to increase seed germination and small plant growth.

*Soil Imprinting*
Soil imprinting entails raking small trenches to roughen the texture on surface soil and to collect wind-blown seed. Hand tools such as shovels and rakes shall be used.

*Raking*
On non-designated trails formed after a single trespass (one person at one time) or trails with little or no vegetation trampling or soil compaction after trespass, work crews shall rake or sweep with a broom the top one inch of soil to hide the evidence of tracks. Soils may also be contoured to match surrounding land. Only hand tools shall be used.

*Barricading with Rice Straw Bales*
Certified weed-free bales of rice straw shall obstruct OHV travel on closed areas formerly used for non-designated hill climbs and on non-designated OHV trails. The bales slow and diffuse soil erosion and water flow down slopes. Over time, rice straw bales break down and provide mulch for plants grown from seeds trapped on the upslope side of the decomposing bale. A truck to transport bales is the only mechanical equipment required.

*Terracing with Berms*
Berms or terraces slow and disperse water flow. People shall use hand tools to disturb the top one to six inches of soil.

*Water Bars*
Water bars divert water flow away from the exposed surface of a road to the sides of the road, reducing water velocity along the exposed surface and thereby reducing erosion. People shall use hand tools to disturb the top one to six inches of soil.

*Vertical Mulching*
Dead plant material placed at the beginning of non-designated trails off of BLM-designated trails can disguise these trails and deter additional illicit OHV traffic. Large desert shrubs on the soil surface act as barricades. Similarly, dead shrubs or branches planted upright in the soil make the trail blend in with surrounding vegetation. Vertical mulch also benefits restoration by trapping wind-blown seeds and lessening wind erosion just above the ground surface. This work shall be accomplished with hand tools. Little soil disturbance would be needed except where mulch is "planted" and thus requires a small hole to anchor the material.

*Large Rocks*
Barricades may consist of a row of large rocks and boulders to deter use in especially fragile areas. Placement of rocks requires no equipment and little or no soil disturbance is associated with their use. Fencing would entail soil disturbance, but no areas have been identified thus far where fencing is necessary.

*Planting Vegetation*
Re-vegetating involves directly planting native species to the line of sight from a BLM-designated OHV trail to accelerate improvements to soil stability, vegetation cover and diversity, and wildlife habitat. Eventually re-vegetation disguises trails. Planting shall make use of hand tools (shovels) and some mechanized equipment (augers) to dig holes up to two feet deep and one foot wide, for the largest transplants. In extraordinary cases, transplantation of larger plants would require somewhat larger holes potentially up to three feet deep and three feet wide. After planting, work can contour soil to direct the flow of rainwater or irrigation water to plant roots.

Planting vegetation requires considerable advance work. First, the restoration ecologists shall gather local provenances of seeds for native shrub, forb, and grass species. In dry years, it may be necessary to irrigate specimens of plant species desired for propagation by seed. To propagate plants from seed and to hold young plants before outplanting, the restoration ecologists shall form a contract with Joshua Tree National Park Nursery or construct portable lath houses.

*Seeding*
Seeding requires rakes to collect seed from seed banks in the soil or from dried seedpods still attached on plants. Hand sowing spread seeds across the soil surface. Raking shall disturb at most the top one-inch of soil. Hand seeding also may be concurrent with soil pitting (see above) to improve seed germination rates.

*Signing*
Insufficient or ambiguous signs on BLM-designated routes cause responsible OHV riders to accidentally ride on non-designated routes. To help riders, the restoration ecology team shall work closely with a trail maintenance team to maintain existing signs and place new signs wherever necessary. Various signs may be appropriate to site needs; and recreational, directional, special designation, or informational signs may be needed. Special designation signing shall also indicate areas of re-vegetation to prevent unintended trampling. Signing work may involve a Carsonite sign driver that can disturb soil to a one-foot depth but with a minimal surface width disturbance, or a post-pounder for the placement of 4x4 post signs.

*Removing Manufactured Materials and Structures*
The restoration team shall remove litter and other unsightly or potentially dangerous manufactured materials less than 50 years old. If the restoration team discovers previously undocumented materials that appear to be more than fifty years old, they shall consult with the cultural resources specialist at the Palm Springs FO. The cultural resources specialist will assess whether removing materials older than 50 years is appropriate and what documentation or mitigation is appropriate. Removal shall include materials of non-historical value such as abandoned automobiles. Removal of large objects may involve the hiring of a separate contractor such as a Tow-Truck company. Disturbances related to removal will be kept at a minimum, and if removal would pose a threat to a species of concern, no removal will occur.

*Eradicating Noxious Weeds*
The restoration crew shall remove noxious non-native plants and perennial shrubs growing in non-designated routes and trails by hand or with hand tools. If the infestation of noxious weeds appears to require applications of herbicides (as with *Tamarix* sp), the restoration ecologists shall consult with the BLM Palm Springs FO natural resource specialist coordinating the noxious weed program at the FO to arrange for herbicide treatments by an integrated pest management person licensed by the State of California. In the case of *Tamarix* sp., chainsaws may be used by certified personnel under the supervision of a natural resource specialist.

*Maintaining Site Integrity*
People remove barriers and trample plantings on occasion. To minimize costly irreversible damage, rehabilitated sites require maintenance as they are undergoing natural restoration. The restoration ecologists may undertake additional restoration efforts and barriers on a case-by-case basis.

**Summary of proposed work:** Work would be done between the hours of 0700 and 1900, from January 17th 2005 to May 31st 2005 or until all the sites specified in **Table 1** have been restored. Summary information on the unauthorized routes to be restored can be found in **Table 1**, and **Figure 1** is a map of the area to be restored.

**Table 1.** UTM coordinates, route number, site number, azimuth, length to the line-of-sight, and prescribed soil and straw bale treatments of the unauthorized routes to be restored under the proposed action. Sites that are at least partially in congressionally designated wilderness are in bold type. NAD 1983 datum was used for UTMs.

| *UTM Easting* | *UTM Northing* | *Route Number* | *Incursion Number* | *Azimuth (degrees)* | *Line of Sight (meters)* | *Soil Treatment* | *Straw Bales* |
|---|---|---|---|---|---|---|---|
| 595017 | 3726167 | 66050 | 1 | 280 | 75 | decompact | yes |
| 594169 | 3726855 | 660066 | 1 | 28 | 150 | decompact | no |
| 594512 | 3726717 | 660066 | 2 | 80 | 100 | pit | no |
| 601129 | 3720656 | 660068 | 1 | 204 | 100 | water bar | no |
| 601151 | 3720667 | 660068 | 2 | 28 | 40 | none | yes |
| 601908 | 3720326 | 660068 | 3 | 310 | 140 | none | yes |
| **603012** | **3718019** | **660068** | **4** | **162** | **70** | **none** | **no** |
| **603205** | **3717332** | **660068** | **5** | **130** | **100** | **decompact** | **yes** |
| 594401 | 3726952 | 660075 | 1 | 56 | 60 | decompact | no |
| 594303 | 3725010 | 660077 | 1 | 130 | 80 | none | yes |
| 601004 | 3719006 | 660093 | 1 | 90 | 80 | water bar | yes |
| 600730 | 3713727 | 660098 | 1 | 172 | 65 | decompact | no |
| 600968 | 3713914 | 660098 | 2 | 150 | 100 | pit | no |
| 601100 | 3714031 | 660098 | 3 | 128 | 60 | decompact | no |
| 601115 | 3714041 | 660098 | 4 | 128 | 55 | none | no |
| 608470 | 3709772 | 660142 | 1 | 22 | 40 | none | yes |
| **608544** | **3709950** | **660142** | **2** | **22** | **50** | **water bar** | **no** |
| 619745 | 3708821 | 660159 | 1 | 35 | 40 | decompact | no |
| 626329 | 3718101 | 660194 | 1 | 260 | 100 | none | yes |
| 627351 | 3715630 | 660194 | 2 | 210 | 140 | none | yes |
| 627729 | 3714684 | 660194 | 3 | 205 | 80 | pit | yes |
| **619127** | **3720934** | **660202** | **4** | **165** | **150** | **none** | **yes** |
| **619227** | **3720919** | **660202** | **5** | **185** | **100** | **none** | **no** |
| **625641** | **3719161** | **660202** | **6** | **280** | **100** | **decompact** | **yes** |
| 629457 | 3714440 | 660203 | 1 | 300 | 80 | pit | no |
| 624037 | 3710344 | 660257 | 1 | 8 | 80 | decompact | no |
| 623777 | 3710139 | 660257 | 2 | 10 | 40 | decompact | no |
| 623336 | 3709865 | 660257 | 3 | 240 | 50 | pit | no |
| 623257 | 3709807 | 660257 | 4 | 20 | 50 | pit | no |
| 630053 | 3720132 | 660289 | 3 | 340 | 100 | none | yes |
| 629640 | 3720693 | 660289 | 1 | 305 | 60 | water bar | yes |
| 629643 | 3720683 | 660289 | 2 | 208 | 75 | pit | yes |
| 630339 | 3720114 | 660291 | 1 | 10 | 70 | pit | yes |
| 629780 | 3721207 | 660292 | 1 | 178 | 55 | none | no |
| 629828 | 3721057 | 660292 | 2 | 150 | 90 | none | yes |
| **600918** | **3720697** | **660300** | **1** | **300** | **100** | **water bar** | **yes** |
| 629651 | 3720540 | 660324 | 1 | 344 | 100 | pit | yes |
| 629184 | 3720267 | 660324 | 2 | 300 | 100 | pit | yes |
| 594388 | 3724932 | 661040 | 1 | 328 | 20 | none | yes |
| 602686 | 3721735 | HWY195 | 1 | 167 | 80 | none | no |

**Figure 1**. Locations of restoration sites in the Central Meccacopia Project Area.

**{** SHAPE * MERGEFORMAT **}**

## 2. No Action Alternative

The Proposed Action would not be undertaken. Existing management and use of the site would continue subject to applicable statutes, regulations, policy and land use plans. Any revegetation would occur naturally.

## AFFECTED ENVIRONMENT

1. Area Description

Restoration activities would take place in creosote (*Larrea tridentata - Ambrosia dumosa*) scrub and microphyll woodland vegetation communities. A further description of the affected environment can be found in the California Desert Conservation Area Plan EIS (1980, with amendments 1982-2002) and is incorporated by reference.

### Wildlife Habitat/Sensitive Wildlife Species

Reptiles

**Desert tortoise** (*Gopherus agassizii*): Desert tortoise are widely distributed in the desert: from as far north as Olancha south to Mexican border and from the Colorado River west to near Lancaster. The Desert Tortoise (Mojave Population) Recovery Plan shows two major populations or recovery units. These are the Northern Colorado Desert and Eastern Colorado Desert Recovery Units. The highest densities of tortoises are in Chemehuevi and Ward Valleys, on Chuckwalla Bench. Causes for declines include habitat loss, diseases, excessive predation on young tortoises by ravens, collecting, shooting, highway and vehicle kills, and other factors.
Their food preference has been shown to be overwhelmingly native annuals and perennials rather than exotic species such as Schismus sp., Erodium cicutarium or Bromus madritensis ssp. rubens. The native plants are much richer in nutrients and may be essential for health and reproduction. The desert tortoise is a Federal Threatened Species (Mojave Population only) and State-listed Threatened Species.

**Flat-tailed horned lizard** (*Phrynosoma mcallii*): Flat-tailed horned lizard occur throughout the southern portion of the Colorado Desert from the Coachella Valley southward and eastward into Arizona and south into neighboring Sonora. Large portions of the historic range have been lost to inundation of the Salton Sea, urbanization, and agricultural development. Despite considerable effort over the past 15 years, population sizes and trends are unknown due to difficulties in finding an effective population estimation procedure. The flat-tailed horned lizard is a BLM California Sensitive Species and a State Species of Special Concern.

**Couch's spadefoot toad (*Scaphiopus couchi*):** The range of Couch's spadefoot extends from extreme southeastern California eastward through Arizona, New Mexico, Texas, and Oklahoma and southward into Mexico. In California, they occur in the Planning Area from Chemehuevi Wash south to the Ogilby area in Imperial County.

This species is of concern because (1) it has a small range in California; (2) populations are declining in other states; (3) it has a precarious life history; and (4) the capability of sites to impound runoff is easily destroyed. Road construction has created some pond habitat in Imperial County, but these are often subject to off-highway vehicle driving which can destroy soil impoundment capability. In addition to habitat disturbance,

vehicles create noise similar to rainfall, resulting in emergence when conditions are not favorable. Vehicles may also crush vegetative debris which is essential as daytime cover. The Couch's spadefoot toad is a BLM California Sensitive Species and a State Species of Special Concern.

Mammals

**Desert bighorn sheep** (*Ovis canadensis* subspecies *nelsoni*)Bighorn sheep occur in small, isolated subpopulations (demes) within the Sonoran metapopulation. Specific trend data for the subpopulation is not available, but some have declined in recent years. It has been shown that population sizes of 50 individuals or less went extinct in less than 50 years, while populations of greater than 100 sheep persisted for up to 70 years. Movement between subpopulations functions to reduce inbreeding in small subpopulations and to maintain genetic vigor in the larger metapopulation. Movement between mountain ranges is necessary to recognize extirpated ranges. Desert bighorn sheep is a BLM California Sensitive Species and a State Fully Protected Species and a Game Species.

**Colorado Valley Woodrat** *(Neotoma albigula venustra):* The range of Colorado Valley woodrat is from southern Nevada, southeastern California, northeastern Baja California, to western Arizona. Historically, the range of the Colorado Valley woodrat appears to have changed little, even though portions of the range are lost to agriculture and urban development. Colorado Valley woodrats (California subspecies of White-throated woodrat) are found in a variety of habitats including low desert, pinyon-juniper woodlands, and desert-transition chaparral. Areas such as washes where organic debris gathers are particularly attractive. They are often found where prickly pear cactus and mesquite occur. In rocky areas, they prefer using crevices in boulders for cover and nest sites.

The most important threats are the loss of habitat and reduction in habitat quality by removal of nest material such as cactus and woodland. Habitat quality could be reduced by fires or conversion to exotic annuals. The Colorado Valley woodrat is a State Species of Special Concern.

**Burro deer** (*Odocoileus hemionus eremicus*): Burro deer eat foliage from various riparian and microphyll woodland trees, such as willow, palo verde, and ironwood. Various other shrubs complete the diet depending on the season.

Major threats to burro deer are loss of habitat to agricultural development, urbanization, and tamarisk infestation along the Colorado River and, at least in the 1980's, drowning in the Coachella Canal. Burro deer is a State Game Species.

**Mountain Lion** *(Felis concolor):* Within the Study Area mountain lion are restricted to the southern Colorado Desert from Joshua Tree National Park south and west to the Colorado River. They are found in very low numbers primarily in the mountains and wash systems in Imperial County. Burro deer, the primary prey, are known to spend the hot summer and fall in riparian areas along the Colorado River and in dense microphyll woodlands near the Coachella Canal. In winter and spring they move up major washes north from the Coachella Canal and west from the Colorado River. Presumably mountain lions respond to these movements. It may be that mountain lions in the Study Area are merely transient individuals wandering out of other areas and not part of a resident population of mountain lions.

Habitat fragmenting factors, such as Interstate Highways (especially Interstate 10) and aqueducts (especially the Coachella Canal), that affect the distribution and movements of burro deer are probably important to the distribution of mountain lions in the Study Area. Deer populations along the Colorado River have declined as tamarisk has replaced native riparian vegetation; mountain lion numbers have probably declined with this primary prey. The mountain lion in the Study Area is sometimes referred to as Yuma puma (f.c. browni). Under that name it is a State Species of Special Concern.

**California leaf-nosed bat** *(Macrotus californicus):* California leaf-nosed bats occur in the deserts of California, southern Nevada, Arizona and south to northwestern Mexico. In California, they are now found primarily in the mountain ranges bordering the Colorado River Basin, with some records occurring as far west as the Eagle Mountains. In California, surveys showed about 20 maternity colonies and about the same number of winter roosts. The two largest roosts (each sheltering 1500 bats in winter) are in mines in extreme southeastern California. Almost all known roosts are in warm mines.

California leaf-nosed bats occur in lowland desert habitat in California in close proximity to desert wash vegetation. They are dependent on either caves or mines for roosting habitat. All major maternity, mating, and overwintering sites are in mines or caves.

The primary factors responsible for the declines are roost disturbance, the closure of mines for renewed mining and hazard abatement, and the destruction of foraging habitat. The combination of limited distribution, restrictive roosting requirements, and the tendency to form large, but relatively few colonies make this species especially vulnerable. California leaf-nosed bat is a BLM California Sensitive Species and a State Species of Special Concern.

**Pallid bat** *(Antrozous pallidus):* Pallid bats are known from Cuba, Mexico, and throughout the southwestern and western United States. Population trends are not well known, but there are indications of decline. Urbanization, destruction of old buildings, disturbance in caves and old mines, and eradication as a pest are threats to the species.

Pallid bats forage primarily on large arthropods caught on the ground or gleaned off vegetation. Between foraging bouts, pallid bats congregate in night roosts in mines, buildings, and under bridges. Pallid bat is a BLM California Sensitive Species and a State Species of Special Concern.

**Townsend's big-eared bat** *(Plecotus townsendii):* Townsend's big-eared bats are distributed throughout the western United States. In desert areas, old mines may contain from one to several dozen individuals. Recent surveys show marked population declines

for this species in many areas of California. A combination of restrictive roost requirements and intolerance of roost disturbance or destruction has been primarily responsible for population declines of Townsend's big-eared bats in most areas. The tendency for this species to roost in highly visible clusters on open surfaces, near roost entrances, makes them highly vulnerable to disturbance. Roost loss in California has usually been linked directly to human activity (e.g., demolition, renewed mining, entrance closure, human-induced fire, renovation, or roost disturbance). The loss of foraging habitat is also a probable factor in declines of populations in along the Colorado River, where the native floodplain community has been lost to agriculture and tamarisk infestation. Townsend's big-eared bat is a BLM California Sensitive Species and a State Species of Special Concern.

**Pocketed free-tailed bat** (*Tadarida femorosaccus*): Despite only a limited number of records, pocketed free-tailed bats are known to occur in the desert from March through August, when they then migrate out of the area. They have an uneven distribution in the southwestern United States and Mexico. In California, they are found primarily in creosote bush and chaparral habitats in proximity to granite boulders, cliffs, or rocky canyons. Recent observations in California show that this species occurs at only isolated locations in the southern third of the State.

Rock climbing and pesticide spraying may be threats, but specific information is lacking. Pocketed free-tailed bat is a State Species of Special Concern.

**Western mastiff bat** (*Eumops perotis*): Historical records for the western mastiff bat were primarily in southern California between the Colorado River to the coast, but populations are now known to occur throughout the State. Current population trends are not known. They are found in a variety of plant communities, but they roost in cliff faces of granite, sandstone, or basalt. They move relatively short distances seasonally, but do not undergo prolonged hibernation. The species has been heard in open desert, at least 15 miles from the nearest possible roosting site.

Potential threats to the roosting and foraging habitat of western mastiff bats include urban expansion, rock climbing, blasting, vandalism, extermination for pest control, and pesticide spraying. These large, noisy bats are vulnerable to the hysteria which often surrounds bat colonies. Western mastiff bat is a BLM California Sensitive Species and a State Species of Special Concern.

Birds

**LeConte's thrasher** (*Toxostoma lecontei*): LeConte's thrashers are distributed from the Mojave Desert east into southern Utah and northern Arizona, and south into northern Mexico. A disjunct population occurred in the San Joaquin Valley, but most of that range has been lost to agricultural and urban development. LeConte's thrashers are distributed throughout the Study Area, but many areas with suitable habitat are unoccupied. LeConte's thrasher is a State Species of Special Concern.

**Loggerhead Shrike** (*Lanius ludovicianus*)
The Loggerhead Shrike is a short distance migrant that nests in the canopies of desert woodland species. The Loggerhead Shrike is known for its unique behavior of impaling its prey on thorns, barbed wire fences, and similar projections, hence its preference for nesting near areas containing such objects. Though the reason for this behavior is not totally understood, it is supposed that it serves as a means of storing food, and also to

assist in tearing apart the prey since the Loggerhead Shrike does not possess very strong claws. Maligned because it occasionally feeds on small birds, the shrike feeds mainly on beetles, grasshoppers and small rodents. The Loggerhead Shrike has extraordinary eyesight and can focus on a grasshopper in a field 50 to 70 yards away.

Throughout its North American range, the Loggerhead Shrike has aroused serious concern because of its declining numbers throughout its range. It is believed that long-term changes in land use by humans on breeding and wintering ranges probably have contributed most to the decline. Because Loggerhead Shrikes are thinly distributed over a large area it is difficult to estimate the trend in desert Loggerhead Shrike population. Loggerhead Shrikes are distributed throughout the creosote scrubland and Paloverde – Smoketree – Ironwood Woodlands of the Study Area. The Loggerhead Shrike is a State Species of Special Concern.

**Crissal Thrasher** (*Toxostoma crissale*): Crissal thrashers occur from southwestern Utah, southern Nevada, and southeastern California east to southern New Mexico and southwestern Texas and south into Sonora. They are found along the Colorado River Valley, but elsewhere in California populations are highly local and uncommon. Crissal thrasher are also found in Milpitas Wash, Indian Wash, and Chuckwalla Bench and in the Chuckwalla Dune Thicket. Inventory data elsewhere are scant. Agricultural and urban development have greatly reduced the distribution in the Coachella and Imperial Valleys. Agricultural development, urbanization, and tamarisk invasion have greatly reduced numbers. The species is highly vulnerable to noise and other disturbances. Crissal thrashers can be parasitized by brown-headed cowbirds, but they will eject cowbird eggs from their nests. Crissal thrasher is a State Species of Special Concern.

**Golden eagle** (*Aquila chrysaetos*): Golden eagles are the largest raptor in the Planning Area. They forage over rolling foothills and valleys and nest on cliffs in mountainous terrain. Golden Eagles are found throughout North America. They are uncommon, permanent residents throughout the State, but they are most common in Southern California.

They eat mostly rabbits, hares, and rodents, but they occasionally take snakes and other vertebrates as opportunity arises. They need open grassland or low shrub-land for foraging. They hunt by soaring, perching, or quartering during the day.

Some golden eagles migrate through the Study Area in Spring and Fall. Some may winter in and near mountains. Nests, referred to as eyries, are usually on secluded cliffs with overhanging ledges. The large platform of sticks at the eyrie may be used for many years. Usually two young are raised in late spring and early summer.

The major threat is disturbance at the eyrie, especially in the early stages of nesting. Golden eagle is a State Species of Special Concern and is protected by the Bald Eagle Protection Act.

**Ferruginous hawk** (*Buteo regalis*): Ferruginous hawks do not breed in California. They migrate from their breeding grounds in the plains of Canada and the U. S. south to wintering grounds in eastern Colorado and western Kansas to southern Texas. They winter in very low numbers throughout the West. They are known to migrate through California in September and April. They overwinter in very small numbers from mid-October to mid-March in the lower Colorado River Valley , Yuha Basin, West Mesa, and the agricultural areas of Imperial Valley.

Ferruginous hawks are large, broad-winged raptors. They are usually found in grasslands or sparse brushlands and use high, lone trees and power poles for perching. In winter they are found in desert scrub, the fringes of pinyon-juniper woodlands, grasslands, pastures, fallow winter croplands, and playas.

Ferruginous hawks hunt from high perches or by flying low over open terrain. They spend more time on the ground foraging than other hawks. They eat mostly small mammals, particularly rabbits and hares, ground squirrels, and mice, but also some birds, reptiles and insects. Ferruginous hawk is a State Species of Special Concern.

**Prairie Falcon** (*Falco mexicanus*): Prairie falcons breed throughout the arid West from southern Canada to central Mexico. The overall distribution appears to be stable. Prairie falcons are uncommon residents and migrants of open grassland, savannah, and desert scrub habitats. They are found in areas of the dry interior where cliffs provide secure nesting sites. In the desert they are found in all vegetation types, though sparse vegetation provides the best foraging habitat.

They prey mostly on small mammals, birds, and reptiles, hunting mostly in the early morning and late afternoon except when feeding nestlings or when prey is scarce. During the nesting season, they typically forage within 6 miles of the nest.

Within the Study Area it is not known to what extent they move seasonally, but wintering populations in the Study Area are larger than breeding populations.

Historic impacts have included eggshell thinning from pesticide residues, conversion of habitat to agriculture, robbing of eyries by falconers, and shooting. Prairie falcon is a State Species of Special Concern.

**Burrowing owl** (*Speotyto cunicularia*): Burrowing owls range from Texas west to California and from southern Canada south into Mexico. In northern climates they migrate south into the area in the winter. Burrowing owls were formerly common throughout much of California prior to the 1940's, but populations in central and southern California have declined in many areas due to agricultural development and urbanization. Little is known of the status of the burrowing owl in the California desert. Concentrations probably occur in agricultural drainage ditches of the Study Area, just as they do throughout the Imperial and Coachella Valleys. Threats to burrowing owls are habitat conversion and destruction of ground squirrel burrows. Other threats may be accumulated pesticides, direct mortality from ground squirrel poisons, roadside shooting, and burrow destruction from canal and road maintenance. The burrowing owl is a State Species of Special Concern, BLM Sensitive Species, and a USFWS Sensitive Species.

## Soils

A general description of soils found in the Dos Palmas ACEC is part of the California Desert Conservation Plan (1980, with amendments 1982-1999).

## Water

Rain events in the area tend to be comparatively brief and may be locally intense.

**Vegetation/Sensitive Plant Species**

**Orocopia sage *(Salvia greatae):*** An evergreen shrub associated with Sonoran Desert Scrub and Desert Dry Wash Woodland (Creosote Bush Series, Blue Palo Verde-Ironwood-Smoketree Series). This species prefers sandy gravelly soils and is found along dry washes, alluvial slopes and fans. It is known only from the Orocopia Mtns., where we have 26 records. Orocopia sage is a BLM Sensitive Species and is categorized as a California Native Plant Society 1b species.

**Mecca-aster *(Xylorhiza cognata):*** A perennial shrub associated with Sonoran Desert Scrub (Creosote Bush Series). Rare and found only in Riverside CO. This species prefers low-elevation dry canyons and gypsum, clay soils. We have seven records for this species, all from the Mecca Hills. Mecca-aster is a BLM Sensitive Species and is categorized as a California Native Plant Society 1b species.

**California ditaxis (*Ditaxis serrata var. californica*):** An annual or perennial sub-shrub associated with sandy or rocky soils in creosote bush scrub (Creosote Bush Series). It is a BLM Sensitive Species and CNPS List 3 species.

**Realty**

A few private in-holdings and right-of-ways are present in the study area.

**Recreation**

The Mecca Hills-Orocopia Mountains region, by virtue of its unique landscape, is a popular area for both motorized and non-motorized recreation activities. In the Box Canyon area, the labyrinth of winding, eroded badlands and canyons create a wonderfully intricate maze that attracts many hikers into designated wilderness where vehicles and mechanized equipment (such as bicycles) are prohibited.

Numerous opportunities for motorized backcountry touring exist on routes along the outskirts of the Mecca Hills and Orocopia Mountains Wildernesses (casual motorized-vehicle use is prohibited in designated wilderness). Immediately to the south of these wilderness areas is the Bradshaw Trail National Back Country Byway. This historic route, the first through Riverside County, was established for stagecoach passage in the early 1860s to hasten the transport of equipment and supplies, as well as gold, to and from the mines at La Paz (now Ehrenberg), Arizona. The route can be followed today from Dos Palmas near the Salton Sea to Highway 78 south of Blythe, California.

The Meccacopia Trail is a popular OHV route that separates the Mecca Hills and Orocopia Mountains Wildernesses. It provides the only opportunity to travel from the "Drop 31" area to access routes north of the Mecca Hills and Orocopia Mountains without utilizing the paved Box Canyon Road or first driving for some distance in easterly or westerly directions to avoid the two wilderness areas. The Drop 31 area (indicating the 31$^{st}$ inverted siphon along the Coachella Canal to accommodate the flow of water, and vehicles, from one side to the other) is extremely popular for family camping and ATV/motorcycle activities, especially during holiday weekends. The central portion of the Meccacopia Trail—the segment separating the Mecca Hills and Orocopia Mountains Wildernesses was designated "limited" in 2002; motorized-vehicle use of this segment of the route is prohibited from June 1 through September 30, and is allowed the remainder of the year. The northern and southern segments of the route are open year-round.

On the eastern edge of the Orocopia Mountains Wilderness is the Red Canyon Jeep Trail, a four-wheel-drive route that provides visitors with a challenging drive through scenic canyon country. A segment of the route separates the main body of the Orocopia Mountains Wilderness from a

much smaller disjunct portion to the northeast.

Recognizing that significant public recreation issues and management concerns occur in the Mecca Hills-Orocopia Mountains region, the BLM established the 125,441-acre Meccacopia Special Recreation Management Area (SRMA) in 2002, of which 90,304 acres are public lands. It is anticipated that a Recreation Area Management Plan (RAMP) to address these issues and concerns will be initiated in 2005. Part of the overall Meccacopia SRMA management strategy to be addressed through the RAMP includes the following: (1) Protect wilderness values to include minimizing motorized vehicle and mechanized equipment intrusions into the Mecca Hills and Orocopia Mountains Wildernesses; (2) enhance the quality of motorized recreation on public lands surrounding the two wilderness areas and wildlife watering zones by providing adequate facilities and management to direct use and protect environmental values; (3) enhance the quality of non-motorized recreation on public lands by minimizing the potential for conflicts with motorized vehicles, and providing adequate facilities and management to direct use and protect environmental values; and (4) construct and maintain additional water sources with limited vehicle access to discourage bighorn sheep from using the Coachella Canal and to minimize conflicts with off-highway vehicle users.

**Wilderness**

A fraction of the restoration activities under this EA would take place inside BLM Wilderness (Orocopia Mountains and Mecca Hills), where vehicle ways enter wilderness areas.

**Visual Resource Management**

The Visual Resource Management (VRM) system is an analytical process that identifies, sets, and meets objectives for maintaining scenic values and visual quality. It functions in two ways. First, the BLM conducts an inventory that evaluates visual resources on lands under its jurisdiction (**Inventory/Evaluation**). Once inventoried and analyzed, lands are assigned management classifications. Management classes describe the different degrees of modification allowed to the basic elements of the landscape. Second, when management actions are proposed, the degree of contrast between the proposed activity and the existing landscape is measured (**Contrast Rating**, see "Environmental Consequences").

*Inventory/Evaluation*

The visual resources inventory consists of a scenic quality evaluation, sensitivity level analysis, and a delineation of distance zones. Based on these three factors, BLM-administered lands are placed into one of four visual resource inventory classes. Generally, VRM classifications are approved through the Resource Management Planning (RMP) process. However, no VRM objectives were approved for the Mecca Hills-Orocopia Mountains region through the CDCA Plan, as amended (the applicable RMP). In accordance with BLM policy, therefore, interim visual management objectives are herein established for the proposed project area. These are as follows:

> *Mecca Hills and Orocopia Mountains Wildernesses*: VRM **Class 1** is applied to designated wilderness areas; inventory and evaluation of scenic quality, sensitivity level, and distance zones is not applicable. The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
>
> *SRMA excluding wilderness areas*: An assessment of landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modification—elements that comprise "scenic quality" in accordance with the BLM's visual resource management program—results in

an interim scenic quality rating of “B” for the SRMA as a whole. Class “B” areas are those in which there is a combination of some outstanding features and some that are fairly common to the physiographic region. This evaluation is based on the following analyses:

- Landform: The Mecca Hills area is characterized by severe surface variation and highly eroded formations; detail features dominant and exceptionally striking and intriguing. The Orocopia Mountains possess interesting erosional patterns; detail features are interesting though not dominant or exceptional. (score: 4)
- Vegetation: Some variety of vegetation with minor contrasts is present in the SRMA. (score: 2)
- Water: Water is generally absent or not noticeable throughout the SRMA. (score: 0)
- Color: Some variety is present in colors and contrast of the soil, rock and vegetation, but color is not a dominant scenic element. (score: 3)
- Adjacent scenery: Adjacent scenery to the project sites greatly enhances visual quality in the Mecca Hills, and moderately enhances overall visual quality in the Orocopia Mountains. (score: 4)
- Scarcity: Complexity of the Mecca Hills “badlands” is unusually memorable and rare within the region. The Orocopia Mountains are interesting, but fairly common within the region. (score: 4)
- Cultural modification: Cultural modifications in the SRMA include roads, electrical transmission lines, and signs. These modifications are somewhat discordant with the characteristic landscape. (score: -2)

Visual sensitivity is determined in two ways: (1) user volume, and (2) user or public reaction to proposed changes in scenic quality. Relative to other backcountry areas in Riverside County east of the Coachella Valley, frequency of travel in the Meccacopia SRMA is high; concern about proposed changes to scenic quality is medium to high given the extent of designated wilderness in the area. Hence, the overall sensitivity level is “high.”

When assessed from the various routes of travel outside designated wilderness, the proposed project sites occur within the foreground/middleground.

Based on a scenic quality rating of “B,” a high sensitivity level, and a foreground/middleground distance zone, the interim VRM class for the SRMA outside designated wilderness is **Class 2**. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

**Cultural Resources**

The proposed area of restoration is located north of the Bradshaw Trail and the Coachella Canal, and south of Interstate 10. Interstate 10 runs through Shavers and Chuckwalla Valleys; the Bradshaw Trail traverses Salt Creek Pass between the Chocolate and Orocopia Mountains. The western boundary is Cactus City and the eastern boundary is Summit Road.

The valleys in the area were an important east/west travel corridor and a route from the Colorado River to the coast. During the 1950's Francis and Patricia Johnston recorded several segments of trail running between the Big Maria Mountains and San Gorgonio Pass. These trail segments were recorded as CA-RIV-53T and represent a prehistoric travel route with associated ceramic and lithic scatters, occupation sites, and rock art sites.

During the ethnographic period the project area fell within the traditional use area of the Cahuilla Indians. However, because the area served as a major travel route, other groups are known to have used the area. These include the Chemehuevi and Mojave.

In 1862, William David Bradshaw learned of a gold strike in La Paz, Arizona. Knowing that large numbers of miners would be moving from southern California to the gold strikes, Bradshaw started to develop a safe and well-established route to La Paz. From Cahuilla and Cocomaricopa Indian informants, Bradshaw was provided a map of the Cocomaricopa Indian Trail. This trail was first documented by the Spanish in 1821. Bradshaw's "discovery" used existing Indian trails and the previously surveyed Frink Trail to establish stage and water stops such as Dos Palmas along the route.

Riverside County established an official county road from Blythe through the project area in 1914. Highway 60 was constructed in the 1920's through the Chuckwalla Valley and south through Box Canyon to Mecca. In the 1930's Highway 60 was modified to connect directly to Indio. Interstate 10 was completed in 1968.

During the historic period the area contained small towns or roadside stops associated with the county road and highways. Most of these were abandoned when the Interstate was completed. Chiriaco Summit represents a roadside stop that survived the construction of I-10. Cactus City, established in 1935, began as a temporary camp for Highway and Colorado River Aqueduct construction in the 1920's-1930's. Other activities in this area include mining, the construction of the Colorado River Aqueduct, and the establishment of the WWII Desert Training Center.

Beginning in the 1880's, north of Dos Palmas, miners searched the hills for rich gold prospects. Individual miners and consolidated mining firms had claims throughout the area. Some of the larger mines drove 300ft of tunnels into the mountains and included rotary and stamp mills, cyanide plants and tramways. Most of the consolidated mines and individual claims were played out or abandoned shortly after the turn of the century.

The Eagle Mountain mine is located north of the project area and was the largest iron-producing mine in the region. The Eagle Mountain railroad, constructed in the late 1940's, served to transport iron from the mine south to the Southern Pacific Railroad at the Salton Sea. The Eagle Mountain railroad passes through the eastern portion of the project area and is considered eligible for listing in the National Register of Historic Places due to its relationship with regional mining and economic development. The Eagle Mountain Railroad will not be affected by the proposed undertaking.

The Colorado River Aqueduct was constructed between 1933 and 1938. The aqueduct, and

associated construction camps and features, is located north of Interstate 10 and outside of the project area.

The Desert Training Center was established by General George S. Patton Jr. in 1942. The Desert Training Center (DTC) was intended to prepare troops for combat in North Africa. Camp Young, the first of several Divisional Headquarters, is located north of Highway 60 and outside of the project area. However, the area south of the highway was used for training maneuvers and includes several features associated with the DTC.

Class III, intensive pedestrian, cultural resources inventories were conducted of all sites proposed for restoration. The results are documented in: Kind, Aaron S. "Cultural Resources Survey for Proposed OHV Restoration Routes in the Mecca Hills and Orocopia Mountains Wilderness" December 2004. A total of five archaeological sites were recorded. Four of these sites were prehistoric. The prehistoric sites were composed of lithic concentrations and possible trail segments. A single historic site was identified. The site is a concentration of historic refuse that may be associated with the Desert Training Center or construction of the Colorado River Aqueduct or highways.

The restoration team will be given instruction in how to distinguish between modern trash and historic deposits greater than 50 years in age. They will consult with PSSC archaeological staff before removing any material that may exceed 50 years of age. The restoration team will also be given an introduction to the types of archaeological sites typical of the project area. If any previously unidentified cultural resources or artifacts are encountered during the proposed restoration activities, all work will cease and the PSSC Cultural Resources Specialist will be otified.

2. Land Status

**1. Land Use Classification:** Majority 'BLM Multiple Use Class L,' some 'BLM Multiple Use Class M' and some 'BLM Wilderness.'

***2.*** **Valid Existing Rights:** The proposed action does not affect any existing rights-of-way. Some restoration sites are adjacent to rights-of-way of the Navy, Kaiser Eagle Mountain and/or Kaiser Steel Corporation, and FERC, but the proposed action does not interfere with or block these rights-of-way. Proposed restoration sites in Township 6S, Range 10E, Sections 6-8 are near a rest stop off of Interstate 10 (Cactus City) and near a communications site. Consequently, Border Patrol, Highway Patrol, California Department of Transportation, AT&T, Pacific Bell, Southern California Edison, and Sprint have rights-of way in these sections, but the proposed action will not interfere with or block these rights-of-way. Access to private land in the Meccacopia SRMA is not precluded by the proposed action.

## ENVIRONMENTAL CONSEQUENCES

### 1. Critical Elements

The following table summarizes potential impacts to various elements of the human environment, including the "critical elements" listed in BLM Manual H-1790-1, Appendix 5, as amended. Elements for which there are no impacts will not be discussed further in this document.

| Environmental Element | Proposed Action | No Action Alternative |
|---|---|---|
| Air Quality | Short-term | Reduced by wind erosion from exposed roads |
| ACEC's | N/A | N/A |
| Cultural Resources | No effect | May increase impacts |
| Native American Concerns | N/A | N/A |
| Farmlands | No impact | No impact |
| Floodplains | No impact | No impact |
| Energy (E.O. 13212) | No impact | No impact |
| Minerals | No impact | No impact |
| T&E Animal Species | Potential effect | May increase impacts |
| T&E Plant Species | Potential effect | May increase impacts |
| Invasive, Nonnative Species | Beneficial impact | No impact |
| Wastes (hazardous/solid) | No impact | No impact |
| Water Quality (surface and ground) | No impact | No impact |
| Wetlands/Riparian Zones | No impact | No impact |
| Wild and Scenic Rivers | No impact | No impact |
| Wilderness | Positive impact | Impacts to wilderness values |
| Environmental Justice | No impact | No impact |
| Health and Safety Risks to Children | No impact | No impact |
| Visual Resource Management | Conforms to VRM Class 1 objectives in wilderness, and Class 2 objectives elsewhere | May not conform to VRM Class 1 objectives in wilderness, or Class 2 objectives elsewhere |

**2. <u>Discussion of Impacts and Proposed Mitigation Measures</u>**

*<u>AIR QUALITY</u>*

**A. Discussion of Impacts**

**1. Proposed Action:** An increase in fugitive dust during wind storms could occur due to the soil disturbance as a result of the proposed action. Vehicle use on the access road will generate PM-10 emissions throughout the project. Emissions from the proposed action will be minimal. No significant offsite impacts are anticipated. Control measures are not included and are not necessary to reduce emissions from the proposed project. The proposed project does not exceed

the deminimus emission levels and no further conformity determination is necessary.

**2. No Action Alternative**: Impacts would continue to occur at current levels. Disturbed, exposed surfaces such as roads and trails experience increased wind erosion/fugitive dust.

**B. Mitigation Measures**

1. Use water as necessary to limit fugitive dust blowing off the site during the work if fugitive emissions exceed state and/or Riverside Co. APCD standards.

2. Curtail activities when wind speeds exceed 25 MPH.

**C. Residual Impacts**

No long term residual adverse effects on air resources are expected from the proposed action. The impacts are expected to occur during the duration of the proposed action. Once the action is completed the site should return to pre disturbance stability.

*WILDLIFE*

**A. Discussion of Impacts**

**1. Proposed action:**

Restoration of non-designated trails to natural conditions would occur on sites with pre-existing disturbances from OHV traffic. Restoration activities would create new but temporary, small-scale disturbances to set natural soil recovery and re-vegetation processes in accelerated motion for site rehabilitation and improved wildlife habitat.

Restoring soil contours and vegetation would create wildlife habitat, including habitat for desert tortoise and desert bighorn sheep. Restoration work may occur during active periods in the seasonal cycles of desert tortoise and desert bighorn sheep. It is not likely that burrows would be found in the trail or route beds. Desert tortoise may burrow into berms and water ditches along the sides of undesignated trails and routes that receive very little use. Changing these features during restoration could impact the burrows of tortoises and might injure individuals.

*Threatened and Endangered Species: Desert Tortoise*

A small probability exists that the proposed actions could result in take of a desert tortoise during restoration activities. That take may be on the BLM-designated routes or on non-designated OHV trails during restoration activities, where heavy equipment is used. Since no heavy equipment will be used for restoration activities, the likelihood of take is extremely low.

*Other Wildlife*

No other wildlife species would be negatively affected, and no additional impacts to wildlife resources are anticipated.

**2. No Action Alternative:** Some negative impacts to wildlife resources would continue to occur because of continuing vegetation loss and soil erosion occurring on non-designated OHV trails. This results in a reduction in available food resources and impaired water quality, which could cause population decreases for all species, including Threatened and Endangered Species. Also, desert tortoises would continue to be threatened by vehicular travel on the non-designated and designated 'closed' routes.

**B. Mitigation Measures**

In addition to the environmental protection measures incorporated in the section on the spectrum of

Proposed Actions, BLM resource specialists and the US Fish and Wildlife Service have outlined additional mitigation measures in Appendix 1 of this document.

**C. Residual Impacts**
No long term residual adverse effects on wildlife are expected from the proposed action.

*SOILS*

**A. Discussion of Impacts**

**1. Proposed Action:** Restoration of non-designated trails and routes would impact soils by modifying texture, particle size distribution, chemical properties, and biological content in affected soils. Pitting of some soils (i.e. desert pavement) may create areas with a different color, drawing attention to the restored area. Positive impacts from a restoration can include a reduction of wind and water erosion in the long-term. Smoothing and scarifying soil can expose soil to wind erosion. In addition, some temporary soil loss from wind blown erosion is likely. However, in the long-term, soil loss would decline because of increased vegetation.

The application of Permeon will have no impact on soils. Permeon is a chemically neutral substance and will not harm humans or wildlife. More information on Permeon can be accessed on the web at: http://www.permeon.com/question.shtr.

**2. No Action Alternative:** Under the No Action Alternative, some impacts to soils would continue to occur. This includes compaction by vehicular traffic, and wind and water erosion.

**B. Mitigation Measures**
Sites with the desert pavement soil type, or those with marked changes in soil color in the top 10 cm of soil, will not be pitted or decompacted. In addition to the other environmental protection measures incorporated in the Proposed Action, BLM resource specialists may select from the list of additional mitigation measures outlined in BLM manuals/handbooks and other documents.

**C. Residual Impacts**
There would be few residual impacts to soils after mitigation from rehabilitation activities. Generally, these activities will increase infiltration and percolation rates in affected soils, increase available water, breakup soil compaction and loss of organic matter.

*VEGETATION*

**A. Discussion of Impacts**

**1. Proposed action:**
Most of the non-designated trails to be restored are already partially or entirely devoid of vegetation. Restoration under this EA would improve the vegetative cover and create more wildlife habitat with native vegetation. Populations of early-stage shrubs would be the first species to increase while in the long-term late-stage shrubs such as creosote would establish themselves in restored shrublands.

Some non-native plant species may be eradicated locally. No soil disturbance would occur within a meter of special-status plants. Restoration sites have been surveyed for special status plants, and the crew would reexamine the site for newly emerged special status plants before they begin work. If the special status plants are not correctly identified, they may be impacted by soil disturbance.

Indirect impacts would be in the form of dust settling on the nearby vegetation stands, which may reduce photosynthetic capabilities.

**2. No Action Alternative:** Some impacts to vegetation resources would continue, such as trampling of vegetation by continued OHV travel on routes and trails that have not been approved for such use.

**B. Mitigation Measures**

In addition to environmental protection measures incorporated in the Proposed Action, BLM resource specialists may select from the list of additional mitigation measures outlined in BLM manuals/handbooks and other documents. Weed treatments with herbicides will require special approval and coordination with the Palm Springs FO Weed Specialist.

**C. Residual Impacts**

No long term residual adverse effects on vegetation are expected from the proposed action

*CULTURAL RESOURCES*

**A. Discussion of Impacts**

**1. Proposed action:** In locations where cultural resources have been identified adjacent to restoration sites, the APE will be redesigned to avoid the resources. As a result, no cultural resources occur within the proposed project area. There will be no effect to historic properties as a result of the proposed action.

**2. No Action Alternative:** Vehicle traffic may cause breakage and displacement of artifacts and features directly and through erosion. Vehicle access to remote cultural sites also makes them vulnerable to looting and collecting of artifacts. Under the No Action Alternative access to existing cultural resources will continue.

**B. Mitigation Measures**

A qualified archaeologist or archaeological technician will monitor restoration activities in areas where the project has been modified to avoid cultural resources.

**C. Residual Impacts**

No long term residual adverse effects on cultural resources are expected from the proposed action of restoration.

*RECREATION*

**A. Discussion of Impacts**

**1. Proposed Action:** Most recreational activities in the Meccacopia SRMA rely on the use of vehicles, whether as an element of the primary activity itself (e.g., vehicle touring for sightseeing purposes), or to access such recreation resources as dispersed campsites and trailheads. The requirements for vehicular access, be they recreational, administrative, or for other purposes, were considered during the route designation process for the NECO plan. The approved network of vehicle routes is deemed satisfactory in meeting access needs for recreation while protecting various other resource values, particularly those related to wildlife, wildlife habitats, and cultural resources. The proposed restoration of vehicle routes, trails, and tracks that were not approved for use through the NECO plan, therefore, would result in no adverse impacts to recreation; use of these vehicle ways is not necessary to for the enjoyment of recreational resources in the SRMA.

**2. No Action Alternative:** Motorized-vehicle activities on routes, trails, and tracks not approved for such use does not conform to BLM's land use plan. The proposed action is one element of a strategy to implement route designation decisions made through the NECO plan. Absent this or other actions to encourage the use of approved routes, recreationists could be issued citations for traveling where it is

inappropriate and illegal to do so, thereby adversely affecting their recreational experience. Further, degradation of resource values (such as soil erosion, crushing of vegetation, and wildlife mortality) from vehicular use of closed or non-approved routes, trails, and tracks would adversely affect opportunities for such recreational endeavors as sightseeing, nature study, and photography.

**B. Mitigation Measures**
A program to inform the public about the restoration of closed and non-approved vehicle routes, trails, and tracks should be established. The intent of the program would be to encourage the use of approved routes for motorized-vehicle activities, and describe the adverse impacts associated with the use of non-approved vehicle ways.

**C. Residual Impacts**
No residual adverse impacts to recreation are anticipated.

*WILDERNESS*
**A. Discussion of Impacts**
**1. Proposed Action:** The proposed action would restore existing vehicle ways to a more natural condition. The proposed action will eliminate several non-designated ways leading into Wilderness, thereby reducing the possibility of illegal driving in Wilderness and helping to preserve wilderness values.

**2. No Action Alternative**
Existing non-designated and designated closed ways in wilderness would continue to be present, and vehicles may continue to use them.

**B. Mitigation Measures**
Work in Wilderness would be by crews accessing the area on foot and using hand tools (the minimum tool).

**C. Residual Impacts**
No residual adverse impacts to wilderness are anticipated.

*VISUAL RESOURCE MANAGEMENT*
**A. Discussion of Impacts**
**1. Proposed Action:** Unlike most other proposed actions that add a new element to or otherwise modify the characteristic natural landscape, restoration activities tend to remove cultural modifications with the goal of simulating or achieving natural conditions that existed prior to establishment of the modification. Hence, the contrast rating process would appear inappropriate in such circumstances. Instead, it is reasonable to conclude that restoration efforts would, by virtue of their goal, conform to all VRM objectives, whether Class 1, 2, 3, or 4, in the long term. In the short term, however, the proposed action may or may not conform to VRM Class 1 or Class 2 objectives, depending on the restoration technique(s) employed. For example, the use of rice straw bales to obstruct vehicle travel would likely attract the attention of the casual observer, which is contrary to VRM objectives for Classes 1 and 2.

**2. No Action Alternative:** Allowing natural processes to accomplish restoration of closed and non-approved vehicle routes, trails, and tracks instead of undertaking a proactive restoration program may or may not be successful, presuming continued vehicle use could be prevented through other means. For example, failure to control water runoff on a steep vehicle route could result in a deepening of wheel ruts with little chance for revegetation to occur, whereas the application of appropriate restoration techniques may conserve existing soils and allow plants to

once again grow on the site. Relative to achieving the applicable VRM objective(s), failing to intervene in the restoration process may exacerbate the visual intrusion of an existing cultural modification, i.e., a vehicle route, trail, or track may increasingly attract attention contrary to VRM objectives for Class 1 and 2 areas.

**B. Mitigation Measures**
No additional mitigation measures are necessary.

**C. Residual Impacts**
As previously indicated, short-term nonconformance with VRM objectives may occur. In the long term, however, adverse residual impacts are not anticipated.

**3. Cumulative Impacts**

This section addresses the cumulative impacts of the proposed restoration activities on the affected environment, continuing activities in and around the project area, and any foreseeable future activities. Because other activities within the potentially cumulative impact area (project area and vicinity) are generally isolated from each other and from the proposed action, either by distance or by topography, the potential for a cumulative impact on most of these identified resources is minimal.

Within the project area, loss of habitat, vegetation, and soils have led to adverse impacts to desert tortoises and creosote shrub communities. Soil loss may be contributing to decreased air and water quality although no data specific to the project area are available. Decrease in quality of these resources may result from one or more of the following land uses: grazing, non-recreational off-highway vehicle use, recreational off-highway vehicle use, and invasions of alien plants.

By following the operating and mitigation measures outlined in this document the effects of other existing and reasonably foreseeable future activities, including the proposed action, would not significantly affect an environmental resource or the continuation of existing land uses.

**FREEDOM OF INFORMATION ACT CONSIDERATIONS:**
Public comments submitted for this environmental assessment, including names and street addresses of respondents, will be available for public review at the Palm Springs-South Coast Field Office during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your comments. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

**PERSONS / AGENCIES CONSULTED:**
This Environmental Assessment incorporates informal consultations with the US Fish and Wildlife Service and California Department of Fish and Game for the 2003 programmatic EA for restoration work in the Project Area (EAs CA-660-03-016) and for 2005 work in the Northern and Eastern Meccacopias (CA-660-05-010). Persons consulted were:

Carol Roberts, US Fish and Wildlife Service, Carlsbad Fish and Wildlife Office
Eddie Konno, California Department of Fish and Game, Bermuda Dunes
Kim Nicol, California Department of Fish and Game, Bermuda Dunes

**PREPARED BY:**
Starry Sprenkle, ECO Restoration Ecologist
Jason Tinant, ECO Natural Resources Specialist
Wanda Raschkow, BLM Cultural Resources Specialist
Aaron Kind, ECO Archaeological Technician
James Foote, BLM Recreation Specialist

**REVIEWED BY:** _____ _____
Environmental Coordinator Date

**U.S. DEPARTMENT OF THE INTERIOR**
**BUREAU OF LAND MANAGEMENT**
**PALM SPRINGS-SOUTH COAST FIELD OFFICE**

# DECISION RECORD
# CA-660-05-18

**NAME of PROJECT:** Central Meccacopia OHV Route Restoration

**DECISION:** It is my decision to approve the proposed action as described in Environmental Assessment (EA) number CA-660-05-18. Compliance with the mitigation measures identified in the EA is hereby required. These measures are incorporated into this decision record as stipulations by reference. A copy of this Decision Record and attendant conditions of approval (stipulations) shall be in the possession of the on-site operator during all undertakings approved herein.

**RATIONALE:** This project is approved due to the beneficial effect to wildlife habitat from restoring non-designated OHV routes. The approved action is in conformance with applicable land use plans and will not cause unnecessary or undue degradation.

**FINDING OF NO SIGNIFICANT IMPACT:** Environmental impacts associated with the proposed action have been assessed. Based on the analysis provided in the attached EA, I conclude the approved action is not a major federal action and will result in no significant impacts to the environment under the criteria in Title 40 Code of Federal Regulations 1508.18 and 1508.27. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

**APPEALS:** This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 of the Code of Federal Regulations (CFR), Part 4, and the information provided in Form 1842-1 (enclosed). If an appeal is taken, your notice of appeal must be filed in the Palm Springs-South Coast Field Office, Bureau of Land Management, U.S. Department of the Interior, 690 West Garnet Avenue, P.O. Box 581260, North Palm Springs, California 92258, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, pursuant to Title 43 of the Code of Federal Regulations, Part 4, Subpart E, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

## Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) the relative harm to the parties if the stay is granted or denied,
(2) the likelihood of the appellant's success on the merits,
(3) the likelihood of immediate and irreparable harm if the stay is not granted, and

(4) whether the public interest favors granting the stay.

**RECOMMENDED BY:** _____ _____

Field Manager Date
Palm Springs-South Coast Field Office

**APPROVED BY:** _____ _____

District Manager Date
California Desert District
USDI Bureau of Land Management
6221 Box Springs Blvd.
Riverside, CA 92507

**Appendix 1:** ***Desert Tortoise Mitigation***

Desert tortoise clearance surveys will occur prior to all project activities. If a tortoise is observed within 100 feet of the project area, all activities potentially affecting individual tortoise will cease and will not continue until the individual has moved out of the area of impact. Any desert tortoise burrows observed within 100 feet of project activities will be avoided. The following standard tortoise mitigation measures will apply:

1. All work will take place during the desert tortoise inactive season, November 1 – March 1.

2. An employee education program must be presented to all on-site workers prior to beginning work. The program may consist of a class or video presented by a qualified biologist (BLM or contracted) or a video. Wallet-sized cards with important information for workers to carry are recommended. All on-site workers shall participate in a tortoise education program prior to initiation of reclamation activities. The operator is responsible for ensuring that the education program is developed and presented prior to conducting activities. The program shall cover the following topics at a minimum:

   - Distribution of the desert tortoise,
   - General behavior and ecology of the tortoise,
   - Sensitivity to human activities,
   - Legal protection,
   - Penalties for violations of State or Federal laws,
   - reporting requirements, and
   - Project protective mitigation measures.

3. Only biologists authorized by the USFWS and the BLM shall handle desert tortoises. The BLM or the proponent shall submit the name(s) of the proposed authorized biologist(s) to the USFWS for review and approval at least 15 days prior to the onset of activities. No activities shall begin until an authorized biologist is approved. Authorization for handling shall be granted under the auspices of consultation through the small project programmatic EA.

4. The authorized biologist shall be required on-site during the activities. The biologist will thoroughly survey the project site for presence of tortoises each day before and during construction activities. This biologist shall have authority from the operator to halt any action that might result in harm to a tortoise.

5. The area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, pubic health and safety, and other limiting factors. Work area boundaries shall be delimited with flagging or other marking to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrows, identified by the qualified biologist shall be avoided to the extent possible. To the extent possible, previously disturbed areas within the testing site shall be utilized for the stockpiling of excavated materials, storage of equipment, digging of slurry pits, location of office trailers, and parking of vehicles. The qualified biologist, in consultation with the project proponent, shall ensure compliance with this measure.

6. To prevent tortoises from falling in, holes shall be either fenced or covered as much of the time as possible and at all times when not attended.

7. Desert tortoises may be handled only by the authorized biologist and only when necessary. New latex gloves shall be used when handling each tortoise to avoid the transfer of infectious diseases between animals. Aside from the initial site clearance, any tortoise moved shall be placed in the shade of a shrub in the direction in which it was facing when found or at the entrance to a burrow if hibernating. In general, tortoises should be moved the minimum distance possible to ensure their safety.

8. The authorized biologist shall maintain a record of all desert tortoises handled. This information shall include for each tortoise:
   1) The locations (narrative and maps) and dates of observations;
   2) General condition and health, including injuries and state of healing and whether animals voided their bladders;
   3) Location moved from and location moved to;
   4) Diagnostic markings (i.e., identification numbers or marked lateral scutes).

9. Upon locating a dead or injured tortoise, the operator is to notify the BLM. The BLM must then notify the appropriate field office (Carlsbad) of USFWS by telephone within three days of the finding. Written notification must be made within fifteen days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death, if known, and other pertinent information. Tortoise remains shall be collected, delivered to the BLM, and frozen as soon as possible. Injured animals shall be transported to a qualified veterinarian for treatment at the expense of the project proponent. If an injured animal recovers, the USFWS should be contacted for final disposition of the animal.

10. All trash and food items shall be promptly contained within closed, raven-proof containers. These shall be regularly removed from the project site to reduce the attractiveness of the area to ravens and other tortoise predators.

11. Structures that may function as raven nesting or perching sites are not authorized except as specifically stated in the plan of operation or notice. The project proponent shall describe anticipated structures to the BLM during initial project review.